Livingston Field Office Technical Guide Section II-A April 2002

Physical Properties of the Soils

Sumter County, Alabama

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

		I		I			1		l	Erosi	on fac	tors		Wind
Map symbol	Depth	Sand	Silt	Clay	Moist	Permea-	Available	•	Organic	l			_ ' ' ' ' ' ' '	erodi-
and soil name					bulk	bility	'	extensi-	matter		!			bility
		 	 	 	density 	(Ksat)	capacity	bility 	 	Kw	Kf	T	group	index
	In	Pct	Pct	Pct	 g/cc	In/hr	In/in	Pct	Pct	¦	¦	i	<u> </u>	
AmA:		 	 	 	 		 	 	 		 			
Alamuchee	0-5			10-25	1.25-1.55	0.57-1.98	0.12-0.18	0.0-2.9	1.0-3.0	1.28	.28	5	3	86
	5-52			20-35	1.20-1.50	0.57-1.98	0.12-0.20	0.0-2.9		1.28	.28		1	
	52-65			14-30	1.20-1.50	0.57-1.98	0.12-0.20	0.0-2.9		1.28	.28			
Mooreville	0-6		 	5-27	 1.40-1.50	0.57-1.98	0.14-0.20	0.0-2.9	0.5-2.0	1 .37	.37	5		
	6-42			18-35	1.40-1.50	0.57-1.98	0.14-0.18	3.0-5.9		1.28	.28			
	42-60			10-40	1.40-1.60	0.57-1.98	0.14-0.18	3.0-5.9		1.28	.28			
AnA:		 	 	 			 	 	 					
Annemaine	0-6			10-20	1.30-1.55	0.57-1.98	0.12-0.16	0.0-2.9	0.5-1.0	1.28	.28	5	3	86
	6-18			35-50	1.30-1.45	0.06-0.20	0.14-0.18	3.0-5.9		.37	.37			
	18-30			40-60	1.25-1.40	0.06-0.20	0.14-0.18	3.0-5.9		1.37	.37		1	
	30-42					0.20-0.57	'	•			.37		1	
	42-60			5-25	1.40-1.60	0.20-1.98	0.14-0.18	0.0-2.9		1.32	.32			
BgA:		 	 	 				 	 					
Bigbee	0-10			4-10	1.40-1.50	5.95-19.98	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5		
	10-65			1-10	1.40-1.50	5.95-19.98	0.05-0.08	0.0-2.9		1.17	.17			
CaA:		l I	 	l I	 		 	 	 		 			
Cahaba	0-7			7-17	1.35-1.60	1.98-5.95	0.10-0.14	0.0-2.9	0.5-2.0	1.24	.24	5	3	86
	7-38			18-35	1.35-1.60	0.57-1.98	0.12-0.20	0.0-2.9		1.28	.28		1	
	38-60			4-20	1.40-1.70	1.98-19.98	0.05-0.10	0.0-2.9		.24	.24			
DkE2:		l I	 	l I	 		 	 	 	1	 			
Demopolis	0-5			17-35	1.35-1.60	0.20-0.57	0.10-0.15	0.0-2.9	1.0-2.0	1.20	.32	2	6	48
_	5-9			20-35	1.40-1.65	0.20-0.57	0.03-0.06	0.0-2.9	0.5-2.0	1.32	.32		1	
	9-60					0.00-0.00								
Kipling	 0-2		 	28-32	 1.30-1.45	0.06-0.20	10.20-0.22	 3.0-5.9	0.5-2.0	1 .32	 .32	 5		
÷	2-38	· 		36-60	1.37-1.41	0.06-0.20	0.20-0.22	6.0-8.9	i	.32	.32	İ	İ	į
	38-60			40-60	1.57-1.60	0.00-0.06	0.18-0.20	9.0-25.0		1.32	.32		1	

Map symbol	 Depth	 Sand	 Silt	 Clay		bility	 Available		 Organic	Erosion factor			erodi-	Wind erodi-
and soil name		[[[bulk density 		water capacity	extensi- bility	matter 	 Kw 	 Kf 		bility group 	bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct	; 	 	 	' 	
DsB:	 	 	 	 	 			 	 	 	 	 	 	
Demopolis	0-6					0.20-0.57	•		1.0-2.0	1.37	.37	2	4L	86
	6-14 14-60			20-35	1.40-1.65	0.20-0.57	0.10-0.15	0.0-2.9	0.5-2.0	1 .32	.32			
	14-60			 	 	0.00-0.00 		 	 			1	 	
Sumter	0-9	· 	· 	10-27	1.40-1.60	0.57-1.98	0.12-0.17	0.0-2.9	2.0-5.0	.37	.37	3	5	56
	9-23			35-57	1.15-1.55		0.12-0.17	6.0-8.9	1.0-2.0	1.37	.37			
	23-60					0.00-0.00								
EsA:	! 	! 	! 	! 	 				 		İ	i	i i	
Escambia	0-8					1.98-5.95			0.5-2.0	.24	.24	5	3	86
	8-23					0.57-1.98				.24	.24			
	23-65			8-35	1.45-1.65	0.06-0.57	10.10-0.18	0.0-2.9		1.28	.28	1		
	! 	! 	! 	! 	 				 		İ	i	i i	
GdE3:		ĺ	ĺ	ĺ	İ		Ì		İ	İ	İ	ĺ	İ	Ì
Gullied Land												-		
Demopolis	l l 0-2	 	 	 17-35	 1 35-1 60	 0.20-0.57	10 15-0 17	 3 N=5 9	 1 N=2 N	1 .37	I I .37	1 2	 4T,	I I 86
Demoports	2-6		 			0.20-0.57				1.32	1.32	2	411	1
	6-60					0.00-0.00	i			i	i	İ	İ	j
		1		ļ .	<u> </u>		1							
HoA: Houlka	I 0-5		 	 40-55	 1 45=1 65	 0.57-1.98	10 18-0 22	 6 N=8 9	 0.5-1.0	1 .32	1 .32	15		
Hourka	5-60		 			0.00-0.06			0.5 1.0	1.32		1	 	
	İ	i	İ	İ	i i		i	I	I	i	İ	İ	İ	j
KpA: Kipling	l l 0-5			16.00		 0.06-0.20			 0.5-2.0	1 .32	 .32			
Kipiing	U-5 5-42					0.06-0.20				1 .32		1 5		
	42-65					0.00-0.06	•			1.32		i	İ	i I
		1		I			1	l	I					
KpB2: Kipling	l I 0-7			20 22	1 20 1 45	 0.06-0.20	10 20 0 22		 0.5-2.0	1 .32	 .32			
Kipiing	1 0-7 1 7-42					0.06-0.20			1	1 .32	1 .32	1 5		
	42-65					0.00-0.06					.32	i	İ	İ
	l	I	l	I	l i				I	1	I		I	
KuC:	1 0 6	 		20 22	1 20 1 45		10 20 0 22	2 0 5 0	0 = 0 0					
Kipling	0-6 6-38					0.06-0.20			0.5-2.0	1.32	1.32	5 		
	38-60					0.00-0.20	•				1 .32			
	l	I		l			I		l	1				
Urban Land												-		

 Depth 	Depth	Dept.h	Depth	Depth	Depth	Dept.h	Depth	Dept.h	l Sand	Silt	Clav	Moist	Permea-	Available	l Tinear I	Organic				erodi-	Lerodi -
	Sand		Cray 	bulk density	bility (Ksat)	water	extensi-	_	 Kw	 Kf	l	bility									
In	 Pct	 Pct	 Pct	 q/cc	_ _ In/hr	 In/in	 Pct	Pct	<u> </u>	 											
	İ	İ	İ			i i	İ		i	I	İ	İ	i								
0 0			7.00		1 00 5 05			0 5 1 0													
											5	3	86								
	 	 									 	1	 								
33-60	 												İ								
0-4	l I –––	l I –––	I I 7-20	l l1 35–1 65 l	1 98-5 95	10 11-0 15		0 5-1 0	1 24	I I 24	I I 5	1 3	I 86								
	' 	 									1	1	1								
											İ	ì	İ								
28-60											İ	İ	i								
0-7			10-40	1.35-1.45	0.06-0.20	10.20-0.22	3.0-5.9 I	1.0-3.0	i .37	.37	I 5	i	i								
7-44									.32	.32	İ	i	İ								
44-60			35-75	1.40-1.55	0.00-0.06	0.18-0.20	6.0-8.9		1.32	.32		İ	İ								
0-12			14-30	1.48-1.60	0.06-0.20	0.19-0.22	0.0-2.9	0.5-1.0	.32	.32	5	6	48								
12-60			35-50	1.35-1.65	0.06-0.20	0.14-0.20	3.0-5.9	0.5-1.0	1.32	.32		İ	İ								
	 	 	 						1	 	 	 	 								
>0				i		i i					4										
0-6			27-50	1.30-1.50	0.00-0.06	0.20-0.22	6.0-8.9	1.0-4.0	1.37	.37											
6-60			40-55	1.30-1.50	0.00-0.06	0.18-0.20	9.0-25.0		.32	.32											
	! 	! 	! 																		
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	i I	I	İ	i i		i	i i		i		İ	i _	i .								
											4	5	56								
18-60	 	 	18-32 	1.60-1.80 	0.20-0.57	0.05-0.10	0.0-2.9 		.24	.24 	 		 								
	l	l			0 == 4 00																
0 1											4	1 5	56								
4-18 18-65	 	 									 	 	 								
							ļ		1												
0-2	 	 	 3-16	 1.50-1.60	0.57-1.98	0.10-0.15	 0.0-2.9	0.5-3.0	1 .24	l .24	 4	3	 86								
2-16	' I	I							1.28		 I	1	 I								
2 10																					
	In 0-8 8-22 22-33 33-60 0-4 4-14 14-28 28-60 0-7 7-44 44-60 0-12 12-60 >0 0-6 6-60 0-9 9-18 18-60 0-4 4-18 18-65	In Pct	In Pct Pct Pct	In	In Pct Pct Pct g/cc 0-8 7-20 1.35-1.65 8-22 35-50 1.25-1.55 22-33 20-40 1.35-1.65 33-60 10-35 1.35-1.65 4-14 35-50 1.25-1.55 14-28 20-40 1.35-1.65 28-60 10-35 1.35-1.65 28-60 10-35 1.35-1.65 44-60 35-60 1.40-1.55 44-60 35-75 1.40-1.55 0-12 14-30 1.48-1.60 12-60 35-50 1.35-1.65 >0 27-50 1.30-1.50 6-60 40-55 1.30-1.50 6-60 18-32 1.45-1.65 18-60 18-32 1.45-1.65 18-65 18-32 1.45-1.65 18-65 18-32 1.60-1.80 0-2 3-16 1.50-1.60	In Pct Pct Pct Pct g/cc In/hr	In Pet Pet Pet Pet g/ee In/hr In/in	bulk bility water extensi- capacity bility	Dulk Dulk Dulk Capacity Dulk Dulk Capacity Dulk Dulk Capacity Dulk Dulk Capacity Dulk Dulk Dulk Capacity Dulk Dulk Dulk Capacity Dulk Dulk Dulk Dulk Capacity Dulk	Dulk Dility Water extensi Matter Kw	bulk bility capacity bility kw Kf		Dulk bility density (Ksat) capacity bility Ew KW Kf T group								

Map symbol and soil name	 Depth	 Sand	 Silt	 Clay		'	 Available		 Organic	Erosi	on fac		erodi-	Wind erodi-
	 	 	 	[[[bulk density 		water capacity 		matter 	 Kw 	 Kf 		bility group 	bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct	<u> </u>	<u> </u>	<u> </u>	i	İ
Urban Land					 	 		 				 -	 	
SmB:	 	1		l I	 	 	 	 	 	1			l I	
Smithdale	0-11					1.98-5.95			0.5-2.0	1.17	.20	5		
	11-45 45-65					0.57-1.98 1.98-5.95	'			1 .24	1 .24			1
	45-65 			12-27	1.40-1.55	1.98-5.95 	0.14-0.16	0.0-2.9 		1 .28	.28 	1	 	1
SrA:	į	i	i	i	İ		i	İ	İ	i	İ	į	i	i
Sucarnoochee	0-22					0.06-0.20				1 .32	1 .32	5	4	86
	22-32 32-65	1				0.00-0.06					1.32	1		1
	32-03			1 43-70	1	0.00-0.00 		0.0-0.9		1 .32	.52		 	1
SuB2:	İ	İ	İ	i	İ	I	İ		İ	İ	İ	İ	İ	İ
Sumter	0-5					0.06-1.98				1.37	.37	2	4	86
	5-15 15-29					0.06-1.98 0.06-1.98				1.37	1 .37			1
	1 29-60	i		33-37		0.00-1.98		3.0-3.9 	1	.32	.5/	1	 	
		i	į	i	i İ		i	İ	İ	i	i	i	i	į
SuC2:	Ι			l	1	Ι	L	Ι		1		Ι	I	1
Sumter	0-2					0.06-1.98				1.37	1.37	2	4	86
	2-22			35-5/	1.15-1.55	0.06-1.98	0.12-0.17	6.0-8.9	0.0-0.0	.37	.3/	1		1
	22 00	İ		! 		0.00 0.00 			İ	i	İ	İ	! 	
SvB:	Ī	ĺ	İ	ĺ	l		İ	l	Ī	İ	ĺ	ĺ	ĺ	İ
Sumter	0-8					0.57-1.98			2.0-7.0	1.28	.37	3	6	48
	8-12 12-32					0.06-1.98 0.06-1.98				.37	1.37			
	1 32-60			33-37	1	0.00-1.90		3.0-3.9	1	.32	.3/	1	 	1
	02 00	i	İ	i	İ		İ			i	i	i	i	İ
TrB:					l	I	I	l						
Troup	0-54 54-75					5.95-19.98				.10	1.10	5	2	134
	54-75 			1 15-35	11.40-1.60	0.57-1.98	10.10-0.13	0.0-2.9 		1.20	1 .20	1	 	1
		i	İ	i	İ		İ			i	İ	i	i	İ
TSE:				1	1	l	1	Ι	1	1	1		l .	1
Troup	0-50 50-60					5.95-19.98 0.57-1.98			0.5-1.0		1.10	5	2	134
	50-60 			1 15-35	11.40-1.60	0.57 - 1.98	10.10-0.13	0.0-2.9 		1 .20	1 .20	1	 	1
Smithdale	0-16	i	· 	2-8	1.40-1.50	1.98-5.95	0.05-0.10	0.0-2.9	0.5-2.0	.17	.20	5		
	16-42					0.57-1.98				.24	.24		1	
	42-60			12-27	1.40-1.55	1.98-5.95	0.14-0.16	0.0-2.9		1.28	.28		1	
TuB:	 	1	 	 	 	 	 	 	 	1	 	I I	 	1
Typic Udorthents,		i									i	-		i
Loamy					I	l			I		1			

Map symbol	 Depth	 Sand	 Silt	 Clay	 Moist	Permea-	 Available	 Linear	Organic	Erosi	on fac	tors		Wind erodi-
and soil name		 	 	į	bulk density	bility (Ksat)	water capacity 	extensi- bility	matter	Kw	 Kf	 T	bility group	/ bility index
	 In	Pct	 Pct 	Pct	 g/cc 	In/hr		 Pct 	Pct	¦	 	 		
VaA:	 	 	 	 				 		l l	 	 	 	
Vaiden	0-6					0.06-0.20	•		0.5-2.0	1.32		5	4	86
	6-34					0.00-0.06				1.32				
	34-60	 	 	40-75 	1.10-1.40 	0.00-0.06	0.10-0.15	9.0-25.0 		.32	.32 	 		
WcB:	 	 	 	 	 					1	 	 	 	
Wilcox	0-4	i		40-55	1.40-1.45	0.06-0.20	0.18-0.20	6.0-8.9	0.5-2.0	i .37	.37	4	i	i
	4-14			40-60	11.40-1.50	0.00-0.06	0.18-0.20	6.0-8.9		.32	.32	i	i	i
	14-41			40-70	1.40-1.55	0.00-0.06	0.15-0.18	6.0-8.9		1.28	.28	İ	İ	İ
	41-65					0.00-0.00								
WuC2:		İ		İ										
Wilcox	0-3					0.06-0.20	•			1.37	1.37	3		
	3-11					0.00-0.06	•			1 .32		!		
	11-42		 	1 40-70	1.4U=1.55 ===	0.00-0.06	10.15-0.18	6.0-8.9		1.28	.28	1	1	1
	42-60					0.00-0.00						1	1	1
Luverne	I 0-4		 	7-20	ı I 1 . 35–1 . 65 I	1.98-5.95	10.11-0.15	ı	0.5-1.0	1 .24	1.24	I I 5	1 3	I 86
20.02110	4-19		 			0.20-0.57	•			1 .23	1 .23	İ		1
	19-46					0.20-0.57				1.28	.28	i	i	i
	46-60	· 		10-35	1.35-1.65	0.20-0.57	0.05-0.10	0.0-2.9		1.28	.28	İ	İ	İ
		1		1	ı İ		1	İ		1				
	l	I	l	I	ll		1	lI		1	1	1	1	I